

In the Claims

Cancel claims 1-18.

19. [Original] An apparatus comprising:  
a container configured to provide a subject material in a substantially static state;  
and  
at least one sensor provided at a predefined position relative to the container to monitor the turbidity of the subject material at a desired vertical position of the container.

20. [Original] The apparatus according to claim 19 wherein the at least one sensor comprises a plurality of sensors provided at different predefined positions relative to the container to monitor the turbidity of the subject material at a plurality of desired vertical positions of the container.

21. [Original] The apparatus according to claim 19 wherein the at least one sensor comprises:  
a source configured to emit electromagnetic energy towards the container; and  
a receiver configured to receive at least some of the electromagnetic energy.

Cancel claims 22-48.

49. [Original] A turbidity monitoring method comprising:  
providing a container;  
providing subject material in a substantially static condition within the container;  
monitoring the turbidity of the subject material at a predefined vertical position within the container; and

generating a signal indicative of the turbidity of the subject material after the monitoring.

50. [Original] The method according to claim 49 further comprising monitoring the turbidity of the subject material at another predefined vertical position within the container.

51. [Original] The method according to claim 49 wherein the monitoring comprises:

emitting electromagnetic energy towards the subject material; and  
receiving at least some of the electromagnetic energy.

52. [Original] The method according to claim 49 further comprising rotating the subject material during the monitoring.

Cancel claims 53-58.

59. [New] The method according to claim 49 wherein the monitoring comprises monitoring the turbidity of the subject material provided in the substantially static condition.

60. [New] The apparatus according to claim 19 wherein the at least one sensor monitors the turbidity of the subject material in the substantially static state.

61. [New] The method according to claim 49 wherein the monitoring comprises monitoring the turbidity of the subject material provided in a static condition.

62. [New] The apparatus according to claim 19 wherein the container is configured to provide the subject material in the substantially static state.

63. [New] The apparatus according to claim 19 further comprising a process chamber configured to receive and process a semiconductor workpiece using the subject material.

64. [New] A sensor comprising:  
a source configured to emit electromagnetic energy towards a subject material;  
an initial receiver configured to receive at least some of the electromagnetic energy, the initial receiver being configured to generate a signal indicative of the turbidity of the subject material and responsive to the received electromagnetic energy; and  
a housing configured to align the source and initial receiver with respect to the subject material;

wherein the housing is configured to attach to a supply connection containing the subject material and detach from the supply connection without disruption of the flow of subject material within the supply connection.